

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000454**Date Inspected:** 29-Aug-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Huang Wei**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** MTR's/Macroetch Testing**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Sherri Brannon arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QA Inspector observed and/or discovered the following.

**Material Test Reports**

Quality Assurance (QA) Inspector Brannon reviewed Material Test Reports (MTRs) for material received in the ZPMC yard. QA Inspector Brannon checked MTRs for material designation, heat numbers, weights, carbon equivalent, sulfur content, fine grain particles, through-thickness, ultrasonic testing and reduction of area.

**Fillet Macroetch Test**

QA Inspector Brannon randomly observed ZPMC lab personnel Macroetch test fillet weld test specimens. Also, observing these macroetch tests is ZPMC Mr. Huang Wei and ABF representative Mr. Danny McDonald and Mr. Kevin Carpenter. Results of testing are as follows:

**Two (2) Fillet Weld Macroetch Specimens**

Specimen number BBW7226-2 (PQR ID#HP2007226-2) - Pass

Specimen number BBW7251-1 (PQR ID#HP2007251) - Pass

The tests results identified above have been observed and recorded as being compliant with the test requirements as listed within AWS D1.5 (2002). The following test results specimens failed due to lack of fusion specimen number BBW7257-1 (PQR ID#HP2007257). Total fillet weld test specimens three (3). Also, See ZPMC Record

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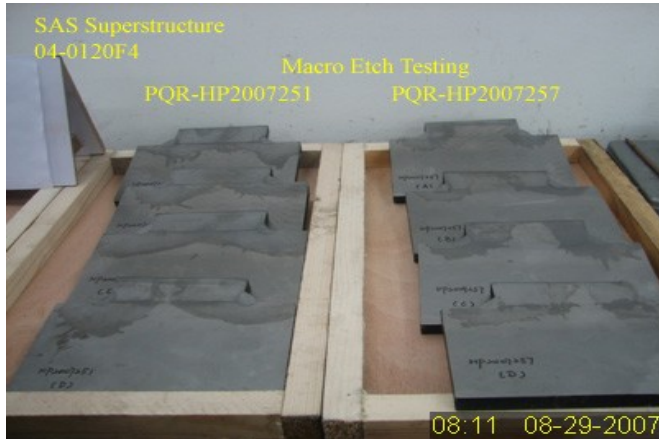
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of WPQT (Macroetch Test) for more detailed information see report #WT-LX-20070829-3. ABF representative Mr. Kevin Carpenter stated that ZPMC should have better lighting for reviewing test specimens. The QA Inspector Brannon assigned Caltrans lot # B22-026-07, B22-027-07 & B22-028-07 respectively to the fillet weld macroetch specimens. This Caltrans 6031 report is supported by three (3) Caltrans 6032 reports for this date.

The following digital photograph illustrates fillet weld macroetch test for PQR ID#HP2007251 and PQR ID#HP2007257.



### Summary of Conversations:

As stated within this report.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Brannon, Sherri	Quality Assurance Inspector
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<b>Reviewed By:</b>	Cuellar, Robert	QA Reviewer
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